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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/401,490	09/22/1999	SATOSHI WATANABE	KOJIM-289	4743

23599 7590 11/21/2002

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EXAMINER

PEREZ RAMOS, VANESSA

ART UNIT PAPER NUMBER

1765

DATE MAILED: 11/21/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/401,490

Applicant(s)

WATANABE ET AL.

Examiner

Vanessa Perez-Ramos

Art Unit

1765

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 July 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-7 and 10-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-7 and 10-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, drawn to a positive working photoresist, in Paper No. 8 is acknowledged. The traversal is on the ground(s) that it hasn't been shown why it would be an undue burden to search and examine both species. This is not found persuasive because even if the search for both species was the same, different patentability issues might arise, creating an undue burden..

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Evers (U.S. 5,300,358).

Evers discloses a composition comprising: a fluorochemical surfactant (col. 7, lines 47-53) which is capable of reducing a contact angle between water and the surface of the material (col. 7, lines 53-58) when the amount of surfactant increases.

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evers (U.S. 5,300,358), as applied to claim 1 above, and in view of Applicant's Prior Art Disclosure.

In regard to claim 2, Evers does not disclose the specific surfactant formula claimed by Applicant.

Applicant disclosed, as part of the prior art, that the surfactant claimed is commercially available under the trade name of KH-10, 20, 30 and 40 from Asahi Glass K.K., and a well known material in the art.

It is the Examiner's position that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Evers by utilizing the specific surfactant formula used, because, being a well known material in the art, commercially available worldwide, its use would have been obvious to one skilled in the art at the time of the invention.

In regard to claim 3, Evers does not disclose that the resist composition is "of chemical amplification type". However, from the specification, it seems to the Examiner that this limitation means that the resist may be able to be exposed to high energy radiation. It is the Examiner's position that, even if Evers is silent as to whether or not his composition is "able to be exposed to high energy radiation", since both Evers' and Applicant's compositions are similar, then Evers' must also be able to be exposed to such energy radiation.

In regard to claim 5, Evers disclose the use of a polymer (col. 2, line 44).

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5. Claims 6-7 and 10-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evers in view of Applicant's Disclosure of Prior Art, as applied to claims 1-3 above, and in further view of Sato (U.S. 5817444).

In regard to claims 6-7, Sato discloses a positive photoresist comprising: a base resin (col. 2, lines 36-45), a photo acid generator (col. 2, lines 46-48).

Sato does not disclose the addition of a fluorochemical surfactant.

Evers in view of Applicant's Disclosure of Prior Art disclose the common use of the claimed fluorochemical surfactant.

It is the Examiner's position that it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Sato by utilizing the claimed fluorochemical surfactant, because of its ability to reduce the contact angle between surface and water, which is desirable in the art.

In regard to claims 10-16, the use of a novolak resin would have been obvious to one skilled in the art, because Sato discloses that the resin and acid generator utilized can be varied from his preferred embodiment.

In regard to claims 17-18, the variation of process parameters such as composition would have been obvious to one of ordinary skill in the art, since result effective variables are routinely varied in order to establish the optimum process conditions.

In regard to claim 19, Sato discloses the use of polyhydroxysterene (col. 3, line 4).

Response to Arguments

6. Applicant's arguments with respect to claims 1-3, 5-7 and 10-19 have been considered but are moot in view of the new ground(s) of rejection.

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7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanessa Perez-Ramos whose telephone number is 703-306-5510. The examiner can normally be reached on Mon-Fri 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benjamin Utech can be reached on 703-308-3836. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7718 for regular communications and 703-305-3599 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5665.

Vanessa Perez-Ramos
Examiner
Art Unit 1765

VPR
November 13, 2002


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